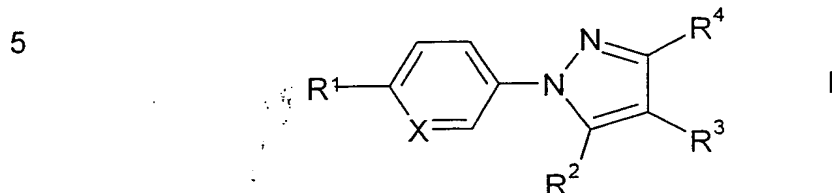


Patent Claims

1. Use of the compounds of the formula I



in which

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X denotes CH or N,

R¹ denotes H, A, Hal, (CH₂)_nHet, (CH₂)_nAr, cycloalkyl having 3 to 7 C atoms, CF₃, NO₂, CN, C(NH)NOH or OCF₃,

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R² denotes (CH₂)_nHet, (CH₂)_nAr, cycloalkyl having 3 to 7 C atoms or CF₃,

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R³, R⁴ denote H, (CH₂)_nCO₂R⁵, (CH₂)_nCOHet, (CH₂)_nCON(R⁵)₂,
 (CH₂)_nCOO(CH₂)_nHet, CHO, (CH₂)_nOR⁵, (CH₂)_nHet,
 (CH₂)_nN(R⁵)₂, CH=N-OA, CH₂CH=N-OA, (CH₂)_nNHOA,
 (CH₂)_nN(R⁵)Het, (CH₂)_nCH=N-Het, (CH₂)_nOCOR⁵,
 (CH₂)_nN(R⁵)CH₂CH₂OR⁵, (CH₂)_nN(R⁵)CH₂CH₂OCF₃,
 (CH₂)_nN(R⁵)C(R⁵)HCOOR⁵, (CH₂)_nN(R⁵)CH₂COHet,
 (CH₂)_nN(R⁵)CH₂Het, (CH₂)_nN(R⁵)CH₂CH₂Het,
 (CH₂)_nN(R⁵)CH₂CH₂N(R⁵)CH₂COOR⁵,
 (CH₂)_nN(R⁵)CH₂CH₂OR⁵, (CH₂)_nN(R⁵)CH₂CH₂N(R⁵)₂,
 CH=CHCOOR⁵, CH=CHCH₂NR⁵Het, CH=CHCH₂N(R⁵)₂,
 CH=CHCH₂OR⁵, CH=CHCH₂Het, (CH₂)_nN(R⁵)Ar,
 (CH₂)_nN(COOR⁵)COOR⁵, (CH₂)_nN(CONH₂)COOR⁵,
 (CH₂)_nN(CONH₂)CONH₂, (CH₂)_nN(CH₂COOR⁵)COOR⁵,
 (CH₂)_nN(CH₂CONH₂)COOR⁵, (CH₂)_nN(CH₂CONH₂)CONH₂,
 (CH₂)_nCHR⁵COR⁵, (CH₂)_nCHR⁵COOR⁵,
 (CH₂)_nCHR⁵CH₂OR⁵, where in each case one of the radicals
 R³ or R⁴ has the meaning H,

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R^5 denotes H or A

A denotes straight-chain or branched alkyl or cycloalkyl having 2 to 4 C atoms, having 1 to 10 C atoms, alkenyl having 2 to 10 C atoms, alkoxyalkyl having 2 to 10 C atoms or cycloalkyl having 4 to 7 C atoms, each of which is unsubstituted or substituted by Hal or CN,

Het preferably denotes a saturated, unsaturated or aromatic mono- or bicyclic heterocyclic radical having 1 to 15 C atoms which is unsubstituted or mono- or polysubstituted by A and/or Hal or a linear radical having 1 to 15 C atoms containing one or two hetero atoms,

Ar denotes a phenyl radical which is unsubstituted or mono- or polysubstituted by A and/or Hal, OR⁵, OOCR⁵, COOR⁵, CON(R⁵)₂, CN, NO₂, NH₂, NHCOR⁵, CF₃ or SO₂CH₃,

n denotes 0, 1, 2, 3, 4 or 5

and

Hal denotes F, Cl, Br or I,

and salts and solvates, enantiomers and racemates thereof for the preparation of a medicament for the treatment and prophylaxis of diseases which can be influenced by the binding of the compounds of the formula I to 5 HT receptors.

2. Use of compounds according to Claim 1 and/or physiologically acceptable salts and solvates thereof for the preparation of a medication having a 5-HT receptor-antagonistic action.

3. Use of compounds according to Claim 1 or 2 and/or physiologically acceptable salts and solvates thereof for the preparation of a medicament having a 5-HT_{2A} receptor-antagonistic action.

4. Use of compounds of the formula I according to Claim 1, 2 or 3 and/or physiologically acceptable salts or solvates thereof for the preparation of a medicament for the prophylaxis and/or treatment of psychoses, neurological disorders, amyotrophic lateral sclerosis, eating disorders, such as bulimia, anorexia nervosa, of premenstrual syndrome and/or for positively influencing obsessive-compulsive disorder (OCD).
5. Use of the compounds of the formula I according to one or more of the preceding claims, in which R^1 denotes phenyl, 2-, 3- or 4-cyano-phenyl, 2-, 3- or 4-fluorophenyl, 2-, 3- or 4-methyl-, ethyl-, n-propyl- or n-butylphenyl, 2,3-, 2,4-, 2,5-, 2,6-, 3,4-, 3,5- or 3,6-difluoro-, di-chloro- or dicyanophenyl, 3,4,5-trifluorophenyl, 3,4,5-trimethoxy- or triethoxyphenyl, thiophen-2-yl or thiophen-3-yl or 1-, 2- or 3-pyrrolyl.
6. Use of the compounds of the formula I according to one or more of the preceding claims, in which R^3 denotes $(CH_2)_nCO_2R^5$, $(CH_2)_nCO-Het$, CHO , CH_2OR^5 , $(CH_2)_n-Het$, $(CH_2)_nN(R^5)_2$ or $CH=N-OA$, $(CH_2)_nN(R^5)Het$, $(CH_2)_nN(R^5)CH_2CH_2OR^5$, $(CH_2)_nN(R^5)CH_2Het$, $(CH_2)_nN(R^5)CH_2CH_2Het$, $(CH_2)_nN(R^5)CH_2CH_2N(R^5)_2$, $CH=CHCH_2NR^5Het$, $CH=CHCH_2N(R^5)_2$, $CH=CHCH_2OR^5$, $CH=CHCH_2Het$ or $(CH_2)_nN(R^5)Ar$.
7. Use of the compounds of the formula I according to one or more of the preceding claims, in which R^4 denotes H.
8. Use of the compounds of the formula I according to one or more of the preceding claims, in which R^2 denotes phenyl, 2-, 3- or 4-cyano-phenyl, 2-, 3- or 4-fluorophenyl, 2-, 3- or 4-methyl-, ethyl-, n-propyl- or n-butylphenyl, 2,3-, 2,4-, 2,5-, 2,6-difluoro- or dicyanophenyl, thio-phen-2-yl or thiophen-3-yl, 2-, 3- or 4-pyridyl, 2-, 4- or 5-oxazolyl, 2-, 4- or 5-thiazolyl, quinolinyl, isoquinolinyl, 2- or 4-pyridazyl, 2-, 4- or 5-pyrimidyl, 2- or 3-pyrazinyl, 2- or 3-furyl.
9. Use of the compounds of the formula I according to one or more of the preceding claims, in which X has the meaning CH.

10. Use of the compounds of the formula (a) to (o) according to Claim 1:
- 5 [1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-ylmethyl]- (a)
(4-methylpiperazin-1-yl)amine
- 4-{2-[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]- (b)
ethyl}morpholine
- 4-{3-[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4- (c)
yl]allyl}morpholine
- 1-[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl- (d)
methyl]pyrrolidin-3-ol
- 10 1-[1-(4'-fluorobiphenyl-4-yl)-5-(2-fluorophenyl)-1H-pyrazol- (e)
4-ylmethyl]-4-methylpiperazine
- 1-[5-(2-fluorophenyl)-1-(4-thiophen-3-ylphenyl)-1H-pyrazol- (f)
4-ylmethyl]-4-methylpiperazine
- 15 1-[5-furan-2-yl-1-(4-thiophen-3-ylphenyl)-1H-pyrazol-4-yl- (g)
methyl]-4-methylpiperazine
- N¹-[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl- (h)
methyl]ethane-1,2-diamine
- 20 2-[[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl- (i)
methyl]amino]ethanol
- [1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-ylmethyl]- (j)
(2-methoxyethyl)amine
- 25 2-[[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl- (k)
methyl]methyldamino]ethanol
- 1-[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl- (l)
methyl]-4-methyl-[1,4]diazepam
- 30 1-[1-(4'-fluorobiphenyl-4-yl)-5-phenyl-1H-pyrazol-4-yl- (m)
methyl]-4-methylpiperazine
- 1-[5-(2-fluorophenyl)-1-(4-pyrrol-1-ylphenyl)-1H-pyrazol-4- (n)
ylmethyl]-4-methylpiperazine
- 35 [1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-ylmethyl]- (o)
methyl-(1-methylpyrrolidin-3-yl)amine

and salts and solvates thereof.